

REMARKS

A. Rule 173(c) Statement of Status of Claims and Support for Claim Changes

Claims 1-9, 11, 12, 14, 19, 20, 22, 50-56, and 59-70 are pending, and claims 10, 13, 15-18, 21, 23-49, 57, and 58 are canceled. Claims 21, 28-32, 34-40, 43-45, 57, and 58 have been canceled by this paper.

Claims 56 and 59 have been amended by this paper. An explanation of the amendment to these claims and an explanation of the support for the same in the original patent is provided in the following chart:

Claim Amendment	Example Support in Original Patent for the Amendment
56. The limitations from claims 57 (each panel comprises a geomembrane) and 58 (insulation material sealed inside each panel by a weld) have been added.	Col. 1, lines 37-42.
59. This claim now depends from claim 56 instead of canceled claim 58.	FIG. 1 of the original patent; col. 1, line 31 – col. 2, line 10.

B. New Supplemental Declarations Filed

New supplemental declarations are submitted pursuant to Rule 175(b)(1).

C. Explanation of Changes to Figure 2 and the Specification

The version of Figure 2 that was noted by the Examiner as accepted in the September 13, 2004 Office Action has been replaced by Amended FIG. 2 appearing on the Replacement Sheet attached to this response. The changes to Amended FIG. 2 are as follows.

Applicants have extended the ends of the left-most cable 12 in the figure into two added boxes, each marked 20, which represent the anchor posts described in the second paragraph beneath the DESCRIPTION OF THE INVENTION heading. Additionally, a portion of a generic

border representing the edge of a pond (referenced, *e.g.*, in the first paragraph beneath the DESCRIPTION OF THE INVENTION heading) has been added near the top of Figure 2. The border is labeled 10. The features shown in the figure have been enlarged relative to the Examiner's version of the figure that is being replaced, and the shape and direction of some of the lead lines has changed.

The specification has been amended to specify element numbers 10 and 20 in the appropriate locations.

D. The Consent of All Assignees Was Filed

On March 14, 2006, Applicants submitted both a Statement Under 37 CFR 3.73(b) on form PTO/SB/96 executed by Industrial & Environmental Concepts, Inc. (IEC), the sole assignee, and a Consent of Assignee on form PTO/SB/53 referencing the Rule 3.73(b) Statement and executed by IEC. Courtesy copies of both of these documents and the postcard filed with them that references them are included with this response as Exhibit 1. This addresses the Office's paragraph 5 on page 3 of the outstanding Action.

E. The Written Description and New Matter Rejections Are Overcome

The Office rejects pending claims 5-9, 11, 12, 14, 19-22, and 50-70 as failing to comply with the written description requirement and as presenting new matter. Action at pp. 3-4. Claim 28, which recited de-linking and re-linking, has been canceled (along with its dependents) in the interest of expediting prosecution. Thus, the Office's position about "de-linking" and "re-linking," which are terms recited only in those claims, is moot. However, Applicants respectfully traverse with respect to the rejection of the pending claims.

1. Independent Claim 5

Independent claim 5 recites a cover and wastewater combination comprising:

wastewater that includes sewage and/or industrial waste;

at least two panels positioned over the wastewater, each panel having a side characterized by an edge and a plurality of openings spaced apart from the edge, the panels being removably linked together in overlapping relationship such that gas from the wastewater can flow from underneath portions of the panels, through gaps between adjacent panels, to a location above the panels; and

the openings in one of the panels being positioned above the openings in the other panel, and a fastener being disposed through at least two adjacent openings.

The Office appears to take issue with the phrase “the panels being removably linked together in overlapping relationship such that gas from the wastewater can flow from underneath portions of the panels, through gaps between adjacent panels, to a location above the panels” and specifically asserts that “there is no mention whatsoever of gases, gaps, or the desirability to allow gases to escape/travel/migrate through gaps[.]” nor is there a discussion of removably linking the panels. Action at pp. 3-4.

A claim satisfies the written description requirement if there is sufficient information in the original disclosure to reasonably convey to one of ordinary skill in the art that the inventors had possession of the claimed subject matter when the original disclosure was filed. *See, e.g., Moba, B.V. v. Diamond Automation, Inc.*, 325 F.3d 1306, 1320 (Fed. Cir. 2003). Both the text and figures of the application may provide the required support. *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997). There is no *in haec verba* requirement, and newly added claim limitations must be supported in the specification through express, implicit, or inherent disclosure. MPEP 2163. A disclosure conveys subject matter implicitly or inherently when that subject matter would be understood as necessarily being present to one of ordinary skill in the art. *Kennecott Corp. v. Kyocera Int'l, Inc.*, 835 F.2d 1419, 1423 (Fed. Cir. 1987).

a. **There is adequate support for the “removably linked” claim language.**

The original application provides adequate support for the “removably linked” language in claim 5. The two panels shown in FIG. 1 are removably linked together using cables 7 that are placed through the overlapping grommets 5 in the edges of the two panels and secured with cable clamps 11:

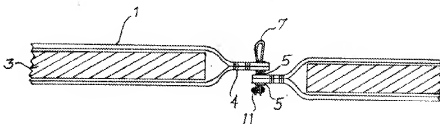


FIG. 1.

Dennis H. Gerber explains in his Rule 132 declaration that someone who had participated in the design and installation of either liners, floating covers, or both, for at least about 6 months to one year would have “would have recognized from reading the application that the disclosed panels could necessarily be de-linked from each other.” 37 C.F.R. § 1.132 Declaration of Dennis H. Gerber at ¶¶ 5-6. Mr. Gerber is an independent consultant on floating cover designs, and has significant experience in the design and installation of floating covers. *Id.* at ¶¶ 1-2. He has been retained by the assignee of this application (Industrial & Environmental Concepts, Inc. (IEC)) on multiple occasions over the past 11 years to consult about some of the assignees floating cover designs. *Id.* at ¶ 3. He was compensated for the time it took to prepare his declaration. *Id.*

Mr. Gerber explains that the application describes how to removably link panels together using cables and cable clamps on page 2 and shows this in the figures. *Id.* at ¶ 6. He explains that:

At the time the application was filed, relevant individuals [those who had participated in the design and installation of either liners, floating covers, or both, for at least about six months to one year] would have been familiar with the use of cables and cable clamps as mechanical fasteners for temporarily connecting two items together; cables and cable clamps were well-known, and it was also well-known that they could be taken apart by simply unthreading some bolts and pulling the cable out of the cable clamp. Thus, it would have been clear to relevant individuals at the time the application was filed that the application disclosed a cover system made from removably linked panels.

Id. at ¶ 6.

b. There is adequate support for gas flowing through the gaps.

The original application also provides adequate support for the gas flowing from underneath portions of the panels that through gaps between adjacent panels to a location above the panels. First, there will necessarily be gaps between adjacent panels arranged, for example, as disclosed. This follows from the fact that the intermittently-spaced connections created using cables and cable connectors (*see* FIG. 2) are not sealed connections. Mr. Gerber explains this:

At the time the application was filed, relevant individuals would have recognized that the linked panels described in the application necessarily had gaps between them because they are linked together with cables and cable clamps. Cables and cable clamps necessarily create non-sealed connections between the overlapping edges of the panels, especially when those connections are spaced apart from each other such as shown in Figure 2. Thus, relevant individuals would have recognized at the time the application was filed that there would necessarily be gaps between the overlapping edges in the space between the adjacent link locations.

Gerber Declaration at ¶ 7.

Second, the application discloses placing the cover systems over wastewater, and explicitly discusses an advantage of using the disclosed cover systems as retaining heat in the

pond and “speeding biodegradation of organic material.” Page 1. Such biodegradation would necessarily have produced gas that rose off the surface of the pond. Mr. Gerber explains this:

The application discusses “settling ponds used for holding sewage and industrial wastes.” Page 1. It also discusses the primary advantage of the invention is that it could be removed, such that the pond could be dredged and the cover re-used. Page 1. It also specifies that another advantage is that the cover insulates the pond, speeding biodegradation of organic material. Page 1. Gas gets produced when biological material, such as sewage or industrial waste, degrades. At the time the application was filed, relevant individuals would have known this, and would have recognized from these page 1 statements and the application as a whole that the application disclosed placing a cover system over wastewater that produced gas.

Gerber Declaration at ¶ 8.

Finally, gas rising off wastewater in a pond would necessarily flow through the gaps between the adjacent, removably-linked panels. While some gas could flow through the openings in the edges of the panels that are partially occupied by the cables, most of it would flow through the gaps between the overlapping panel edges in the space between the adjacent link locations, as Mr. Gerber explains:

Relevant individuals would also have recognized at the time the application was filed that such gas would necessarily escape from underneath the cover through at least some of the gaps I discuss in paragraph 7 above. While some of the gas could escape through the portions of the openings through which the cables were placed, most of it would go through the gaps I discuss in paragraph 7, and relevant individuals would have recognized this at the time the application was filed.

Gerber Declaration at ¶ 8.

* * *

For these reasons, there is adequate written description support for the claim language “the panels being removably linked together in overlapping relationship such that gas from the wastewater can flow from underneath portions of the panels, through gaps between adjacent panels, to a location above the panels[.]” and the written description and new matter rejections of

claim 5 and its pending dependent claims should be withdrawn. *See Ex parte Welsh et al.*, Appeal No. 96-0706 (BPAI 1997) (not binding precedent; copy enclosed as Exhibit 2) (reversing rejection where “examiner appears to have given little or no weight to what he has characterized as allegations and opinions of declarants skilled in the art.”)

2. Independent Claim 50

Independent claim 50 recites a cover and wastewater combination comprising:

wastewater that includes sewage and/or industrial waste; and
at least two panels removably linked to each other, the panels being positioned over and in direct contact with the wastewater;
where each panel contains, but is not completely filled with, an insulation material.

The Office takes issue with the phrase “at least two panels removably linked to each other.” Action at pp. 3-4. There is adequate support in the original application for this language for the reasons set forth above in section E.1.a. Therefore, the written description and new matter rejections of claim 50 and its pending dependent claims should be withdrawn.

3. Independent Claim 55

Independent claim 55 recites a cover and wastewater combination comprising:

wastewater that includes sewage and/or industrial waste;
at least two panels removably linked together in overlapping relationship over the wastewater; and
means for removably linking the panels in overlapping relationship, the means comprising fasteners and openings defined in each of the panels;
where the openings in one of the panels are positioned above the openings in another of the panels to form pairs of openings of different panels, and one of the fasteners is disposed through each pair of overlapping openings so as to removably link the overlapping panels.

The Office appears to take issue with the terms “removably linked,” “removably linking,” and “removably link.” Action at pp. 3-4. There is adequate support in the original application for this language for the reasons set forth above in section E.1.a. Therefore, the written description and new matter rejections of independent claim 55 should be withdrawn.

4. Independent Claim 56

Independent claim 56 recites a cover and wastewater combination comprising:

wastewater that includes sewage and/or industrial waste;

a plurality of panels positioned over the wastewater, the panels being removably linked together to form a non gas-tight cover system, each panel comprising a geomembrane; and

insulation material sealed inside each panel by a weld.

The Office takes issue with the term “removably linked.” Action at pp. 3-4. There is adequate support in the original application for this language for the reasons set forth above in section E.1.a. Therefore, the written description and new matter rejections of claim 56 and its pending dependent claims should be withdrawn.

5. Independent Claim 60

Independent claim 60 recites a cover comprising:

a plurality of panels configured for use over wastewater, the panels being removably linked together such when the cover is positioned over wastewater, gas from the wastewater can travel from below the cover to above the cover through gaps in the removably linked panels;

each panel comprising a material that contains, but is not filled completely with, insulation.

The Office appears to take issue with the bolded language “the panels being **removably linked** together such when the cover is positioned over wastewater, **gas from the wastewater can travel from below the cover to above the cover through gaps in the removably linked**

panels” based on its statements on pages 3 and 4 of the Action. There is adequate support in the original application for the removably linked language for the reasons set forth above in section E.1.a. In addition, there is adequate support in the original application for the “gas from the wastewater can travel from below the cover to above the cover through gaps” language for the reasons set forth above in section E.1.b. Therefore, the written description and new matter rejections of claim 60 and its pending dependent claims should be withdrawn.

6. Independent Claim 63

Independent claim 63 recites a method of manipulating a cover comprising:

linking at least two panels such that (a) the panels are adjacent to each other and
(b) gas can migrate through gaps between the panels, each panel comprising material that contains, but is not completely filled with, insulation; and

disposing the panels over wastewater that includes sewage and/or industrial waste.

The Office appears to take issue with the language “gas can migrate through gaps between the panels” based on its statement that “[t]here is no mention whatsoever of gases, gaps, or the desirability to allow gases to escape/travel/migrate through gaps.” Action at p. 3. There is adequate support in the original application for this language for the reasons set forth above in section E.1.b. Therefore, the written description and new matter rejections of claim 63 and its pending dependent claims should be withdrawn.

F. Claim 56 Is Patentable over Dearing

The Office rejected examined claims 56 and 57 as being anticipated by US 4,197,595 to Dearing. Applicants do not acquiesce to the Office’s assertion that statements in Dearing would have suggested to one having ordinary skill in the art at the time of the invention that the cover system of Dearing could have been used to cover wastewater in a wastewater pond or tank. However, to expedite allowance of this application, Applicants have amended claim 56 to

incorporate the limitations of dependent claims 57 and 58, and submits that the prior art rejection based on Dearing is now overcome and should be withdrawn.

G. Conclusion

Applicant respectfully submits that claims 1-9, 11, 12, 14, 19, 20, 22, 50-56, and 59-70 are in condition for allowance. Should the examiner have any questions, comments, or suggestions relating to this application, he is invited to contact the undersigned attorney at (512) 536-3031.

Date: August 27, 2007

Respectfully submitted,

/Mark T. Garrett/

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EXHIBIT 1

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(b)Applicant/Patent Owner: William D. Morgan/Industrial & Environmental Concepts, Inc.Application No./Patent No.: 06/828,330 / 5,400,549 Filed/Issue Date: Oct. 23, 1993 / March 28, 1995Entitled: Insulated Removable Pond CoverIndustrial & Environmental Concepts, Inc., a corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.
The extent (by percentage) of its ownership interest is _____ %
In the patent application/patent identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

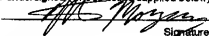
1. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.
2. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.
3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned, whose title is supplied below, is authorized to act on behalf of the assignee.


Signature

March 14, 2006

Date

Michael A. Morgan

(952) 829-0731

Printed or Typed Name

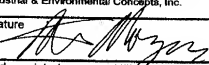
Telephone Number

Vice President

Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

REISSUE APPLICATION: CONSENT OF ASSIGNEE; STATEMENT OF NON-ASSIGNMENT		Docket Number (Optional) IAEC:007USR1
This is part of the application for a reissue patent based on the original patent identified below.		
Name of Patentee(s) William D. Morgan		
Patent Number 5,400,549	Date Patent Issued March 28, 1995	
Title of Invention Insulated Removable Pond Cover		
<p>1. <input checked="" type="checkbox"/> Filed herein is a statement under 37 CFR 3.73(b). (Form PTO/SB/96)</p> <p>2. <input type="checkbox"/> Ownership of the patent is in the inventor(s), and no assignment of the patent is in effect.</p> <p>One of boxes 1 or 2 above must be checked. If multiple assignees, complete this form for each assignee. If box 2 is checked, skip the next entry and go directly to "Name of Assignee".</p> <p>The written consent of all assignees and inventors owning an undivided interest in the original patent is included in this application for reissue.</p>		
The assignee(s) owning an undivided interest in said original patent is/are <u>Industrial & Environmental Concepts, Inc.</u> and the assignee(s) consents to the accompanying application for reissue.		
Name of assignee/inventor (if not assigned) Industrial & Environmental Concepts, Inc.		
Signature 	Date March 14, 2006	
Typed or printed name and title of person signing for assignee (if assigned) Michael A. Morgan, Vice President		

This collection of information is required by 37 CFR 1.172. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Please indicate receipt of the below-identified paper:

<input type="checkbox"/> New Application For:	Priority Date:
<input type="checkbox"/> Foreign priority already claimed	
<input type="checkbox"/> Continuation	<input type="checkbox"/> CIP
<input type="checkbox"/> Specification:	Pages
<input type="checkbox"/> Response to Office Action Dated:	Drawings: Sheets
<input checked="" type="checkbox"/> Other: Trans. Form; Pet. to Revive; Response to Apr '05 OA, inc'g pet. for 3-month extension of time and Deposit Acct authorization; 37 C.F.R. 1.132 Decl. of Michael A. Morgan; State. Under 37 C.F.R. 3.73(b); Rev. of POA with New POA and Change of Corr. Add.; Conset of Assignee; Assignment; Assignment Cover sheet; Suppl. Reissue Decl. Under 37 C.F.R. 1.175(b) and Original Decl. of Added Inventor	<input type="checkbox"/> Final Rejection
<input type="checkbox"/> Assignment Enclosed	<input checked="" type="checkbox"/> Cert. of Timely Mailing
	<input type="checkbox"/> Exp. Mail:

IDENTIFICATION OF APPLICATION

Serial No.:	08/828,330
Title:	Insulated Removable Pond Cover
Applicant:	William D. Morgan
Client:	Industrial Environmental Concepts, Inc.
Mailed:	March 14, 2006
Filed:	
Attorney:	MTG
F&J File No.:	IAEC:007USR1
Due Date:	

EXHIBIT 2

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 67

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID E. WELSH
and OLIVER L. SIMS

Appeal No. 96-0706
Application 08/185,756¹

HEARD: September 18, 1997

Before STONER, *Chief Administrative Patent Judge*, and LYDDANE and
CRAWFORD, *Administrative Patent Judges*.

STONER, *Chief Administrative Patent Judge*.

DECISION ON APPEAL

David E. Welsh and Oliver L. Sims, appellants, appeal from
the final rejection of claims 23 through 40 under the provisions

¹Application for patent filed January 24, 1994. According
to appellants, the application is a continuation of Application
07/643,170, filed January 22, 1991, now abandoned, which is a
continuation of 06/804,339, filed December 5, 1985, now
abandoned, which is a continuation of application 06/537,113,
filed September 29, 1983, now abandoned.

of 35 U.S.C. § 112, first paragraph. Claims 16, 17, 18, 20, 21 and 22, the only other claims pending in this application, have been allowed. We reverse.

The claimed invention pertains to an unbalanced aluminum drive shaft having a balance weight of density greater than that of aluminum secured thereto. We will not further elaborate upon the claimed invention inasmuch as this is the second appeal involving precisely the same claims and rejection. In Appeal Number 93-4353, decided November 24, 1993, in parent application No. 07/643,170, a merits panel of this board affirmed the examiner's rejection of identical claims 23 through 40 under 35 U.S.C. § 112, first paragraph. In that decision, the panel several times noted that there was "no persuasive evidence of record which would support . . . [the appellants'] position [concerning knowledge possessed by the skilled worker] and counsel's argument in the brief cannot take the place of such evidence" (decision, pp. 5 and 7). Familiarity with that earlier appeal and decision is presumed.

In the present continuation application, the appellants have accepted the earlier panel's implicit invitation to provide evidence to support the appellants' position. In particular, the appellants have come forward with declarations by (1) Donald A.

Rhoda, Chief Metallurgist for the Spicer Universal Joint Division of Dana Corporation², (2) David E. Welsh, one of the co-inventors and an employee of the Spicer Universal Joint Division of Dana Corporation, and (3) Douglas E. Breese, an Applications Engineer employed by the Spicer Universal Joint Division of Dana Corporation. Each declarant states that he is very familiar with many metallurgical processes based on his training and employment and declares, in identically worded statements, the following:

4. Although not expressly stated in the specification of the application as originally filed, it is clear to me that the aluminum welding material is welded only to the surface of the drive shaft, and is not welded to any portion of the body of the balance weight. I know this to be true because of the relationship between the inherent properties of aluminum and steel. Aluminum has a relatively low melting temperature in comparison to steel. Thus, when molten aluminum welding material is introduced into the aperture formed through the body of the balance weight, the temperature thereof is too low to melt any portion of the balance weight. Rather, the molten aluminum welding material only contacts the inner surface of the aperture and the outer surface of the body of the balance weight, without causing any melting or welding.

5. Welding is a process by which metals are joined together by the application of heat such that they melt together. In the specification of the application as originally filed, it is clear to me that the aluminum welding material melts a portion of the outer surface of the aluminum drive shaft so as to be

² Dana Corporation is indicated to be the assignee of the present application and the real party in interest in the present cause.

joined thereto. However, the balance weight is described as being formed from a material having a "higher density" than aluminum. Further, the molten aluminum is described in the specification as originally filed as being applied such that a small amount of the material overflows the aperture so as to form a "cap" or "rivet-like weld" to retain the body of the balance weight on the aluminum drive shaft. Thus, it is also clear to me that the term "higher density" indicates that the specific metal (such as steel) used to form the body of the balance weight is not only heavier per unit volume than aluminum, but also possesses a higher melting temperature than aluminum. The aluminum welding material does not and cannot melt any portion any portion [sic] of a balance weight made from such a "higher density" material. Any person having ordinary skill in the metallurgical art would easily comprehend this inherent result from the specification of the application as originally filed.

6. It follows, therefore, that the aluminum welding material does not and cannot cause any substantial deformation of any portion of the body of the balance weight. Much like when hot water is poured into a glass, the temperature of the molten aluminum welding material is simply too low to cause any melting of the "higher density" material, such as steel, which forms the body of the balance weight. Without any such melting, there can be no substantial deformation of the body of the balance weight.

7. Consequently, it is clear to me that the aluminum welding material which extends over the portion of the second end of the body (forming the so-called cap) must provide the sole structure for retaining the body of the balance weight on the surface of the aluminum drive shaft. This must be the result, inasmuch as there is no melting of the balance weight body and, therefore, no welding between the aluminum drive shaft and the balance weight body. Absent the cap structure, it is clear to me that the balance weight body would simply fall off of the drive shaft. The presence of the aluminum welding material within

Appeal No. 96-0706
Application 08/185,756

the balance weight body aperture could not, of itself,
retain the body on the surface of the drive shaft.

* * *

9. The only language of Claim 23 which is not expressly described in the specification of the application as originally filed is that (1) the aluminum welding material is welded only to the surface of the drive shaft and (2) the aluminum welding material extends over, but is not welded to, a portion of the second end of the body.

10. Notwithstanding the lack of express language in the specification of the application as originally filed to this effect, it is clear to me that the specification of the application as originally filed clearly provides support for the noted language of Claim 23. Specifically, at Page 4, Lines 25-30, it is stated that the molten aluminum wire "...is supplied to the interior of the aperture 14...The aperture 14 forms a mold for the molten aluminum 18 above the outer surface of the drive shaft 10". In my opinion, the language "forms a mold" clearly indicates that the molten aluminum is not welded to or otherwise adhered to the body of the balance weight 12.

11. Generally speaking, molds are used to cast articles into desired shapes, then are removed. Sometimes, such molds may be salvaged for re-use when removed from about the cast article. Other times, the molds are destroyed. In either case, the molds do not adhere to the cast article. Likewise, in the specification of the application as originally filed, it is clear to me that the body of the balance weight is not welded or otherwise adhered to the welding material which is supplied therein. Such a situation would run contrary to the plain import of the specification of the application as originally filed, given my knowledge of the inherent properties of aluminum and "higher density" materials, as described above.

12. At Page 4, Lines 30-33, it is stated that "[t]he molten aluminum 18 can be applied such that a small amount of the material overflows the volume of the aperture 14 so as to form a "cap" thereover." In my opinion, the provision of a "cap" further supports the

fact that a non-welded connection is provided between the aluminum drive shaft and the steel body of the balance weight. If a direct welded connection were provided, there would be no need for the "cap" to retain the body of the balance weight on the drive shaft. Again, in my opinion, such a situation would run contrary to the plain import of the specification.

13. At Page 4, Lines 33-34, it is stated that "[t]he molten aluminum 18 adheres readily to the outer surface of the aluminum drive shaft 10." Noticeably absent from this sentence is any suggestion that the molten aluminum adheres (readily or otherwise) to the body of the balance weight. At a minimum, this language indicates to me that the molten aluminum does not weld to the body. When read in context and with the knowledge of the relative metallurgical properties of aluminum and "higher density" materials which would be well known to any person of ordinary skill in this art, it is clear to me that the specification is describing a structure wherein the balance weight is not welded to the drive shaft.

14. At Page 4, Line 34 to Page 5, Line 1, it is stated that "[i]n this manner, a secure spot or rivet-type weld is formed which will maintain the balance weight 12 against the drive shaft 10". Again, the obvious and unambiguous conclusion which a person having ordinary skill would draw from this language (and the preceding language) is that the aluminum welding material is spot welded (i.e., "adheres readily") to the outer surface of the aluminum drive shaft and is formed with a cap to mechanically retain the body of the balance weight against the drive shaft, like a rivet.

15. The only language of Claim 29 which is not expressly described in the specification of the application as originally filed is that the cap provides the sole means for retaining the balance weight upon the drive shaft. Similarly, the only language of Claim 35 which is not expressly described in the specification of the application as originally

filed is that the aluminum welding material does not substantially deform the body of the balance weight. For the reasons set forth above, it is my opinion that these items are characteristics which are inherent in the structure which is expressly described in the specification of the application as originally filed. I believe that any person having ordinary skill in this art would understand that this structure is present in the specification of the application as originally filed, even without any express comments to that effect.

The examiner has maintained the position taken in the earlier application and remains of the view that claims 23 through 40 are based upon a disclosure which fails to provide descriptive support for the invention now being claimed, as required by 35 U.S.C. § 112, first paragraph, notwithstanding the declarations. The examiner's evaluation of these declarations is contained at pages 3 through 8 of the final Office action mailed August 31, 1994. The examiner has otherwise responded to this evidence primarily by referring to statements in our earlier decision (answer, pp. 3-4). In sum, the examiner appears to be of the view that (1) the declarations primarily set forth opinions, entitled to little weight, (2) to the degree that facts are set forth in the declarations, those facts should have been part of the specification of the application as filed, and (3) the facts set forth are insufficient to establish the matters for which they are advanced.

Having carefully considered the conflicting points of view expressed by the appellants and the examiner, we conclude that the § 112, first paragraph rejection of claims 23 through 40 must be reversed.

The situation here is reminiscent of that in *In re Alton*, 76 F.3d 1168, 37 USPQ2d 1578 (Fed Cir. 1996). In *Alton*, the examiner gave little or no weight to a declaration submitted by the appellant *Alton* to overcome a rejection under 35 U.S.C. § 112, first paragraph for failing to provide an adequate written description of the there-claimed amino acid sequence. In *re Alton*, 76 F.3d at 1171, 37 USPQ2d at 1580. In vacating the decision below, the court pointed out:

The adequate written description requirement of 35 U.S.C. § 112, ¶ 1, provides that

[t]he specification shall contain a *written description of the invention*, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

(emphasis added).

The adequate written description requirement, . . . serves "to ensure that the inventor had possession, as of the filing date of the application

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relied on, of the specific subject matter later claimed by him; how the specification accomplishes this is not material." *In re Wertheim*, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976). In order to meet the adequate written description requirement, the applicant does not have to utilize any particular form of disclosure to describe the subject matter claimed, but "the description must clearly allow persons of ordinary skill in the art to recognize that [he or she] invented

what is claimed." *In re Gosteli*, 872 F.2d 1008, 1012, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989) (citation omitted). Put another way, "the applicant must . . . convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention." *Vas-Cath [Vas-Cath, Inc. v. Mahurkar]*, 935 F.2d 1555, 19 USPQ2d 1111 (Fed. Cir. 1991)] 935 F.2d at 1563-64, 19 USPQ2d at 1117. Finally, we have stated that "[p]recisely how close the original description must come to comply with the description requirement of section 112 must be determined on a case-by-case basis." *Eiselstein v. Frank*, 52 F.3d 1035, 1039, 34 USPQ2d 1467, 1470 (Fed. Cir. 1995) (quoting *Vas-Cath*, 935 F.2d at 1561, 19 USPQ2d at 1116).

76 F.3d at 1172, 37 USPQ2d at 1581 (footnote omitted).

Here, as in *Alton*, the examiner appears to have given little or no weight to what he has characterized as allegations and opinions of declarants skilled in the art. Each declarant's use of the words "it is clear to me", just like the declarant's use of the prefatory phrase "it is my opinion" in *Alton* to preface what someone of ordinary skill in the art would have known "does not transform the factual statements contained in the declaration into opinion testimony." Similar to the situation in *Alton*, the examiner here erred by dismissing the declarations

without an adequate explanation of how the declaration failed to overcome the prima facie case initially established . . . -- the rejection on the ground that the application failed to describe the [claimed] subject matter The examiner . . . "bears the initial burden . . . of presenting a prima facie case of unpatentability." *In re Oetiker*, 977 F.2d 1443,

1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). Insofar as the written description requirement is concerned, that burden is discharged by "presenting evidence or reasons why persons skilled in the art would not recognize in the disclosure a description of the invention defined by the claims." *Wertheim*, 541 F.2d at 263, 191 USPQ at 97. Thus, the burden placed on the examiner varies, depending upon what the applicant claims. If the applicant claims embodiments of the invention that are completely outside the scope of the specification, then the examiner or Board need only establish this fact to make out a prima facie case. *Id.* at 263-64, 191 USPQ at 97. If, on the other hand, the specification contains a description of the claimed invention, albeit not *in ipsius verbis* (in the identical words), then the examiner . . . , in order to meet the burden of proof, must provide reasons why one of ordinary skill in the art would not consider the description sufficient. *Id.* at 264, 191 USPQ at 98. Once the examiner . . . carries the burden of making out a prima facie case of unpatentability, "the burden of coming forward with evidence or argument shifts to the applicant." *Oetiker*, 977 F.2d at 1445, 24 USPQ2d at 1444. To overcome a prima facie case, an applicant must show that the invention as claimed is adequately described to one skilled in the art. "After evidence or argument is submitted by the applicant in response, patentability is determined on the totality of the record, by a preponderance of the evidence with due consideration to persuasiveness of argument." *Id.* at 1445, 24 USPQ2d at 1444.

. . . The purpose of the adequate written description requirement is to ensure that the inventor had possession of the claimed subject matter at the time the application was filed. If a person of ordinary skill in the art would have understood the inventor to have been in possession of the claimed invention at the time of filing, even if every nuance of the claims is not explicitly described in the specification, then the adequate written description requirement is met. For example, in *Ralston Purina Co. v. Far-Mar Co., Inc.*, 772 F.2d 1570, 1576, 227 USPQ

177, 180 (Fed. Cir. 1985), the trial court admitted expert testimony about known industry standards regarding temperature and pressure in "the art of extrusion of both farinaceous and proteinaceous vegetable materials." The effect of the testimony was to expand the breadth of the actual written description since it was apparent that the inventor possessed such knowledge of industry standards of temperature and pressure at the time the original application was filed.

In re Alton, 76 F.3d at 1175-76, 37 USPQ2d at 1583-84.

In the present case, we think that the preponderance of the evidence before us supports the appellants' view that a person of ordinary skill in the art would have understood the inventor to have been in possession of the claimed invention at the time of filing. As the court pointed out in *Alton*, there is no requirement that every nuance of the claims be explicitly described in the specification. That being the case, the decision of the examiner must be reversed.

REVERSED

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BRUCE H. STONER, JR., Chief)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
WILLIAM E. LYDDANE)	
Administrative Patent Judge)	APPEALS AND
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)	INTERFERENCES
)	
MURRIEL E. CRAWFORD)	
Administrative Patent Judge)	

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